Report Date: January 13, 2016

Macrogroup: Intertidal Sandy Shore

Habitat Systems within Macrogroup:

MacrogroupName Intertidal Sandy Shore

Sand Beach Sand Flat

SCCN Associated With This Habitat

Sandy Shore Macrogroup - Unknown Habitat System (i.e. Macrogroup)

Submerged Aquatic Vegetation

Description: From the NTHCS: "These intertidal sand flats occurs primarily in embayed areas of the mid-Atlantic and north Atlantic coasts, where rocky or sandy barriers help create protected sounds and lagoons. The invertebrate diversity in these sheltered habitats is higher than that of more exposed sandy beaches. Intertidal sand flats are frequently used by shorebirds, such as sanderlings, semipalmated sandpipers, black-bellied plovers, red knots, and semipalmated plovers." Corresponds to the NTHCS Tidal Sand Flat Description, but also includes natural breakouts for habitat systems. Also adopted from CMECS Substrate Components. This category is equivalent to CMECS Subtrate Class-Fine Unconsolidated shore, Substrate-Sand. This includes particle sizes from very fine sand to course sand.

				2:	10 3	•	9
Actinopterygii (Ray-finned Fishes)	rygii (Ray-finned Fishes)				SGCN Category		
Acipenser oxyrinchus (Atlantic Sturgeon)						1	
Osmerus mordax (Rainbow Smelt)						1	
Acipenser brevirostrum (Shortnose Sturgeon)						1	
Aves (Birds)				9	GCN (Cate	gory
Haematopus palliatus (American Oystercatcher)						3	
Pluvialis squatarola (Black-bellied Plover)						3	
Nycticorax nycticorax (Black-crowned Night-heron)						2	
Calidris alpina (Dunlin)						3	
Ardea herodias (Great Blue Heron)						2	
Aythya marila (Greater Scaup)						2	
Tringa melanoleuca (Greater Yellowlegs)						3	
Sternula antillarum (Least Tern)						1	
Egretta caerulea (Little Blue Heron)						3	
Clangula hyemalis (Long-tailed Duck)						3	
Charadrius melodus (Piping Plover)						1	
Calidris canutus rufa (Red Knot)						1	
Arenaria interpres (Ruddy Turnstone)						2	
Calidris alba (Sanderling)						2	
Calidris pusilla (Semipalmated Sandpiper)						2	
Egretta thula (Snowy Egret)						3	
Numenius phaeopus (Whimbrel)						2	
Tringa semipalmata (Willet)						3	
Gastropoda (Aquatic And Terrestrial Snails)				9	GCN (Cate	gor
Boreotrophon clathratus (Clathrate Trophon)						2	
Colus pygmaeus (Colus Snail)						2	
Limneria undata (Wavy Lamellaria)						3	
Holothuroidea (Sea Cucumbers)				•	GCN (Cate	gor
	Actinopterygii (Ray-finned Fishes) Acipenser oxyrinchus (Atlantic Sturgeon) Osmerus mordax (Rainbow Smelt) Acipenser brevirostrum (Shortnose Sturgeon) Aves (Birds) Haematopus palliatus (American Oystercatcher) Pluvialis squatarola (Black-bellied Plover) Nycticorax nycticorax (Black-crowned Night-heron) Calidris alpina (Dunlin) Ardea herodias (Great Blue Heron) Aythya marila (Greater Scaup) Tringa melanoleuca (Greater Yellowlegs) Sternula antillarum (Least Tern) Egretta caerulea (Little Blue Heron) Clangula hyemalis (Long-tailed Duck) Charadrius melodus (Piping Plover) Calidris canutus rufa (Red Knot) Arenaria interpres (Ruddy Turnstone) Calidris pusilla (Semipalmated Sandpiper) Egretta thula (Snowy Egret) Numenius phaeopus (Whimbrel) Tringa semipalmata (Willet) Gastropoda (Aquatic And Terrestrial Snails) Boreotrophon clathratus (Clathrate Trophon) Colus pygmaeus (Colus Snail) Limneria undata (Wavy Lamellaria)	Actinopterygii (Ray-finned Fishes) Acipenser oxyrinchus (Atlantic Sturgeon) 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Macrogroup: Intertidal Sandy Shore

Species	Psolus phantapus (Psolus)	2
Class	Merostomata (Horseshoe Crabs And Sea Scorpions)	SGCN Category
Species	Limulus polyphemus (Horseshoe Crab)	1

Endangered (E) and Threatened (T) Plant Species Associated With This Habitat: None assigned

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Macrogroup: Intertidal Sandy Shore

Stressors Associated With This Macrogroup

IUCN Level 2 Threat Name: Agricultural and Forestry Effluents

Notes: Though this threat can be reduced with the implementation of best management pratices, in coastal watersheds, runoff can lead to non-point source pollution of nutrients, fertilizer, sediments, pesticides, vehicle contaminants, etc., which can lead to poor

IUCN Level 2 Threat Name: Commercial and Industrial Areas

Notes: Commercial development along sandy shores introduces foot and car traffic, development and trash to intertidal areas that can reduce habitat area and impinge on biological habitats

IUCN Level 2 Threat Name: Commercial and Industrial Areas

Notes: Shoreline development can introduce foot and car traffic, pets, noise, light, and trash that can degrade habitat area and functions

IUCN Level 2 Threat Name: Domestic and Urban Waste Water

Notes: Though this threat can be reduced with the implementation of best management pratices, in coastal watersheds, runoff can lead to non-point source pollution of nutrients, fertilizer, sediments, pesticides, vehicle contaminants, etc., which can lead to poor

IUCN Level 2 Threat Name: Garbage and Solid Waste

Notes: Waste washes onto shores from marine waters or is dumped close to high usage areas. Contributes to biological habitat degredation.

IUCN Level 2 Threat Name: Habitat Shifting or Alteration

Notes: Sea level rise can drown sandy shore habitats and the biological communities they support will be lost or displaced

IUCN Level 2 Threat Name: Habitat Shifting or Alteration

Notes: Sea level rise will drown sandy shore habitats and the biological communities they support will be displaced

IUCN Level 2 Threat Name: Housing and Urban Areas

Notes: Housing along sandy shores introduces foot traffic, pets, development and trash to intertidal areas that can reduce habitat area and impinge on biological habitats

IUCN Level 2 Threat Name: Housing and Urban Areas

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area and functions

IUCN Level 2 Threat Name: Industrial and Military Effluents

Notes: Though this threat can be reduced with the implementation of best management pratices, runoff, oil spills, water uptake and discharge, and other industrial acitivites can lead to poor water quality, and reduced fitness and/or mortality, especially during

IUCN Level 2 Threat Name: Invasive Non-native-Alien Species-Diseases

Notes: e.g. Heterosiphonia japonica is an invasive alga that lets off noxious fumes when it dries and can lead to the closing of beaches; an emerging issue in Maine

IUCN Level 2 Threat Name: Lack of knowledge

IUCN Level 2 Threat Name: Recreational Activities

Notes: Recreational areas (walking areas, frequently used beaches) along sandy shores introduces foot traffic, pets, development and trash to intertidal areas that can reduce habitat area and impinge on biological habitats

IUCN Level 2 Threat Name: Shipping Lanes

Notes: Dredging assoc. with harbors

IUCN Level 2 Threat Name: Shipping Lanes

Notes: Dredging associated with harbors

IUCN Level 2 Threat Name: Storms and Flooding

Notes: Causes erosion of these habitats

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IUCN Level 2 Threat Name: Tourism and Recreational Areas

Notes: Recreational areas (walking areas, frequently used beaches) along sandy shores introduces foot traffic, pets, development

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and trash to intertidal areas that can reduce habitat area and impinge on biological habitats ${\sf red}$

Habitat Conservation Actions:

Relevant conservation actions for this habitat are assigned within broader habitat groupings in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

Species Conservation Actions:

Conservation actions that may benefit species associated with this habitat can be found in Maine's 2015 Wildlife Action Plan: Element 1, Table 1-3. Click on the species of interest to launch a species based report summarizing relevant conservation actions and associated habitats.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.